

What is claimed is:

- 1 1. For an instrument responsive to recipe parameters, a method for creating a recipe, the
2 method comprising:
3 accessing mask set data;
4 recognizing a target structure in the mask set data; and
5 configuring the recipe parameters responsive to the recognized target structure.
- 1 2. The method of claim 1 wherein the recipe parameters for a process layer are queried
2 from a database.
- 1 3. The method of claim 1 wherein the recipe parameters comprise at least one of wafer
2 processing parameters, inspection parameters, and control parameters.
- 1 4. The method of claim 1 wherein the target structure comprises at least one of
2 alignment site, measurement site, overlay target, and array element.
- 1 5. For an instrument instructed by a recipe to perform a task on a wafer, a method
2 comprising:
3 receiving design data describing a die;
4 extracting parameters from the design data relevant to the configuration of the
5 instrument;
6 applying the extracted parameters to at least one die on the wafer; and
7 creating the recipe from the applied extracted parameters, the recipe for performing
8 the task.

- 1 6. The method of claim 5 wherein the task includes at least one of inspection and
2 metrology.
- 1 7. The method of claim 5 wherein the applying uses a stepper setup file.
- 1 8. The method of claim 5 wherein the design data includes at least one of element names
2 and instance types.
- 1 9. The method of claim 5 further comprising inspecting the wafer using the recipe.
- 1 10. The method of claim 9 wherein the inspecting is micro inspection.
- 1 11. The method of claim 9 wherein the inspecting is macro inspection.
- 1 12. The method of claim 9 wherein the inspecting is darkfield inspection.
- 1 13. The method of claim 5 further comprising measuring the wafer using the recipe.
- 1 14. The method of claim 13 wherein the measuring is film measurement.
- 1 15. The method of claim 13 wherein the measuring is critical dimension measurement.
- 1 16. The method of claim 13 wherein the measuring is overlay measurement.
- 1 17. A recipe extraction system using design data specifying one or more die, the system
2 comprising:
3 an access module to access the design data;
4 an analyzer to extract parameters from the design data; and
5 a configuration module to produce a recipe for controlling one of an inspection and a

6 metrology instrument.

1 18. The system of claim 17 wherein the access module is a network interface.

1 19. The system of claim 17 wherein the analyzer performs overlay recipe extraction.

1 20. The system of claim 17 wherein the analyzer performs inspection recipe extraction.

1 21. The system of claim 17 wherein the recipe is a set of instructions for measuring a
2 wafer.

1 22. The system of claim 17 wherein the recipe is a set of instructions for inspecting a
2 wafer.

1 23. An inspection/metrology instrument using design data specifying one or more die, the
2 instrument comprising:

3 an input interface for accessing the design data;

4 an analyzer to recognize target structures in the design data; and

5 a recipe module creating a recipe in accordance with the recognized target structures.